NANOXIA
GERMAN ENGINEERING

DEEP SILENCE 5

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I. Introduction

Congratulations on the purchase of your new Nanoxia Deep Silence 5 big tower. We are confident that you will be delighted by your new PC case for many years to come.

Nanoxia's Deep Silence series have been designed and developed by an experienced team of developers in Germany. The silent optimized PC cases are of the highest quality and combine the best possible functionality with the highest level of flexibility.

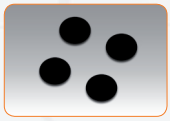
The Deep Silence 5 Tower provides plenty of space for your most demanding projects. Due to the fully modular hard drive cages, the case offers maximum versatility and compatibility, both for water cooling project and the installation of high-end systems with air cooling.

Specifications

Dimensions:	552 x 232 x 550 mm (Height x Width x Depth)
Material:	1.0 mm steel
External drive bays:	3 x 5.25 inch (tool-free)
	1x 5.25 inch /w 3.5 inch adapter (tool-free)
Internal drive bays:	11 x 3.5/2.5 inch bays (decoupled)

Accessories

Rubber sealings for tube holes



EPS extension

Fan screws

Stand-offs for mainboard

Screws for mainboard mounting

Screws for HDD mounting

Screws for 3.5" mounting frame

Mounting screws for 2.5"HDD/SSD

Mounting screws for PSU

Thumbscrews

If you are missing any of the items listed above, please contact our customer service immediately:
support@nanoxia-world.com (Germany and Europe);
support.overseas@nanoxia-world.com (international)

Features:

- **Watercooling-ready**
- **Complete customizable soundproofing** with high quality materials meeting industrial standards
- **Tool-free mounting of optical drives**
- **2 x USB 3.0, 2 x USB 2.0**
- **10 Slots for expansion cards**
- **Max. VGA length: 338 mm (up to 468 mm with the HDD cages removed)**
- Room for CPU coolers with a maximum height of up to 185 mm
- **Mounting hole for CPU cooler in the motherboard tray**
- **Cable management** with 9 rubberised holes in the motherboard tray
- **Stepless 2-channel fan control for up to 6 fans**
- **Nanoxia VentCover (noise indulated):** 2 x top cover

Noise Insulation

The Nanoxia Deep Silence 5 has been developed with the aim to offer the buyer a low-noise case, while at the same time allowing for extremely low system temperatures. The sound insulation design of the Deep Silence 5 is based on multiple interacting design elements:

The most important part is the large scale lining of the case with sound-absorbing insulation materials. These materials are manufactured specifically to meet the requirements of the developers of the Nanoxia Deep Silence case series. The insulation consists of a bitumen fabric layer and a foam compound that acts equally against airborne sound, while the bitumen fabric layer specifically reduces the vibrational characteristics of the case.

Included are special rubber seals which can be used to alternatively close the tube holes above the rear chassis fan, in case you don’t need to use them.

The removable Nanoxia VentCovers mask the 120/140 mm fan holes in the case top. They allow the user to choose between the least possible noise and improved case ventilation.

Another design element for optimum sound insulation is the use of two sound-insulated front doors. The doors are equipped with sound-absorbing foam.

The hard disk drives are installed on trays which feature rubber grommets that are designed to absorb any vibrations caused by the HDDs. The power supply is isolated from the case by a flexible rubber framework and also rests on rubber contact points on the bottom of the PSU.

The whole concept of sound proofing of the Deep Silence 5 meets the highest expectations.

Ventilation System

The Nanoxia Deep Silence 5 has an integrated ventilation system consisting of three 140 mm Deep Silence fans and a built-in 2-channel fan controller. A total of up to six fans can be mounted.

The Nanoxia VentCover under the top can be removed at any time and allow the installation of 120 mm or 140 mm fans for optimized heat dissipation.

The Deep Silence axial flow fans have been specifically optimised for very quiet operation. The range of fan speeds and controls was designed to enable each user to adjust the case ventilation to their own needs.

All air intake openings (front and bottom) are readily accessible and have easy to clean dust filters. Behind the lower front door of the Deep Silence 5 are two “Easy Access Panels”, allowing an easy access to both the dust filter and the front 140 mm fans.

Standard Equipment:

Front:	2 x 140 mm Nanoxia Deep Silence fans (max. 1,100 rpm)
Rear:	1 x 140 mm Nanoxia Deep Silence fan (max. 1,100 rpm)

Optional Equipment:

Top cover:	2 x 120/140 mm fans
Bottom:	1 x 120/140 mm fan (removal of the HDD-holder necessary)

Watercooling-ready

The Nanoxia Deep Silence 5 like any other Nanoxia case has been prepared for the installation of a water cooling system.

Therefore you can install radiators or a compact water cooling solution under the top cover as well as behind the front panel.

Top cover: 120/140/240/280 mm slim radiator

Before installing a water cooling system under the cover, please ensure if there is sufficient distance to the motherboard components. We recommend mounting the radiator behind the front of the case.

Front: 120/140/240/280 mm radiator

Behind the front panel, a 120/140 or 240/280 mm radiator can be mounted. Please note that the front HDD-cages must be removed for this - the HDD cage on the secondary mounting rail can usually remain in the case.

Please note that the radiator must not exceed 315 mm in length.

If you want to mount a compact water cooling system behind the front, you should check before the installation, whether the factory hoses between cooler and radiator are of sufficient length.

Rubber hose guides:

The Deep Silence 5 offers four rubber hose guides, so that the appropriate water cooling components can be operated or mounted externally.

On the next pages you can find some useful tips and explanations for the optimal use of your new case and for the installation of your hardware.

II. Installation Instructions

1. Installation of the motherboard

You can mount E-ATX, XL-ATX, ATX, M-ATX and Mini-ITX motherboards in the Deep Silence 5. In order to ensure an easy installation of your motherboard, we suggest the following procedure:

a) Please consult the following charts to find your motherboard form factor:

E-ATX

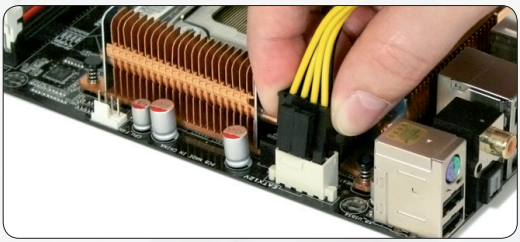
XL-ATX, ATX

Micro-ATX

Mini-ITX

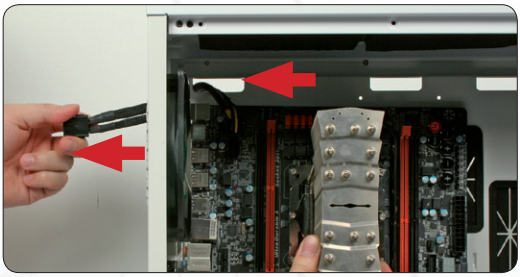
b) Attach the stand-offs according to your motherboard form factor.

c) Attach the included EPS extension cable on to your motherboard – **do not connect it to the power supply yet.**



d) Next you should mount the CPU cooler - for very large CPU coolers, the attachment of the EPS extension cable after installation can be difficult.

e) Now place the motherboard gently inside the case and lead the EPS extension cable through the opening provided in the top left of the mainboard tray.

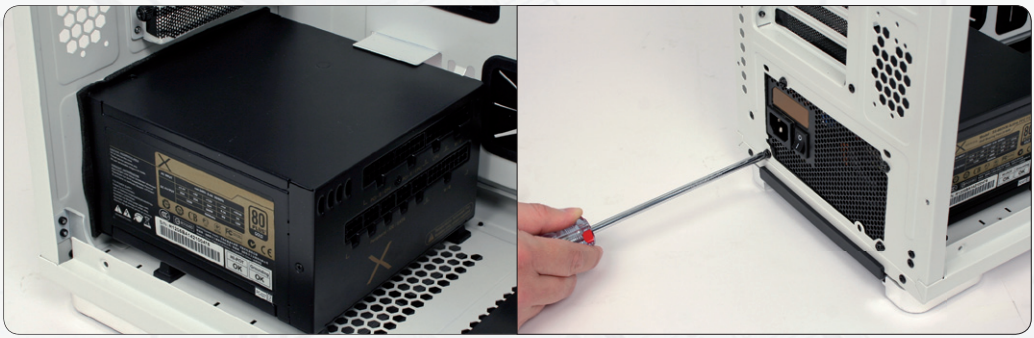


f) Fix the motherboard to the motherboard tray.

g) After the installation of the power supply, you can connect the EPS extension cable to the EPS-connector on the PSU at the back of the motherboard-tray.

2. Installation of the power supply

Please install the power supply according to the pictures below and secure it with the included PSU screws.



3. Installation of external drives

You can install up to four external drives in the Deep Silence 5. An adapter frame for mounting a 3.5 inch drive is included.

3.1 Optical drives

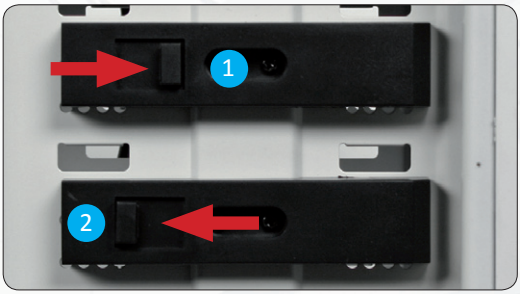
To install the optical drives, please remove both side panels. The installation of optical drives is tool-free.

Remove the 5.25 inch cover by pulling the lateral tilting lever cautiously towards you and take out the cover

Then loosen the lock on both sides by dragging the black slider backwards (1).

Then slide the drive into the desired position.

Lock the holder by pushing the slider back to its original position (2).



3.2 Utilizing the external 3.5 inch bay

If you for example desire to place a 3.5 inch card reader, you can use the internal adaptor for this purpose. Please remove the 5.25 inch cover first. Open the two quick release of the 5.25 inch bay and remove the mounting frame. Then attach the card reader in the frame, as shown below.

Then place the frame with the card reader back into the slot and lock the quick release. Finally, attach the included 3.5 inch front panel carefully on top of the card reader.

Alternatively, the adaptor can be used for the installation of an additional 3.5 inch hard drive.

4. Installation options of HDD's

The Deep Silence 5 allows you the decoupled mounting of 11hard disk drives.

4.1 Mounting of hard disk drives

Install the 2.5 or 3.5 inch hard drives in the illustrated mounting frames. In order to extract the frame, squeeze the protruding brackets and pull the slide out gently.

To install a hard drive into a bracket insert the disk so that the connectors point to the back and attach the hard drive using the screws provided.

For the fitting of 3.5 inch hard drives please use the holes in figure 4A

For the fitting of 2.5 inch hard drives please use the holes in figure 4B

figure 4A

figure 4B

To lock the drive, push the bracket with the drive back installed back into the slot until the bracket is re-engaged.

4.2 Conversion and removal of the HDD-cages

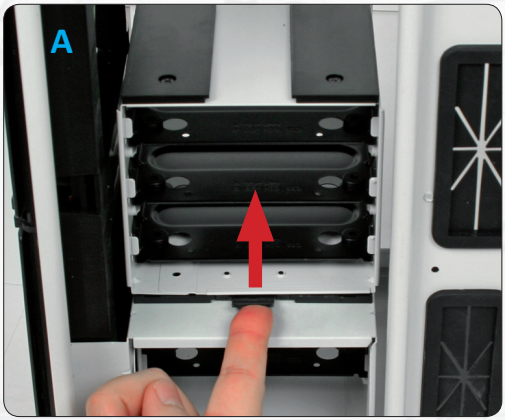
The Deep Silence 5 is equipped with four fully modular HDD-cages (3 x 3-bay, 1 x 2-bay). The cages can be removed, swapped or repositioned almost at will.

Due to this unique variability, you can:

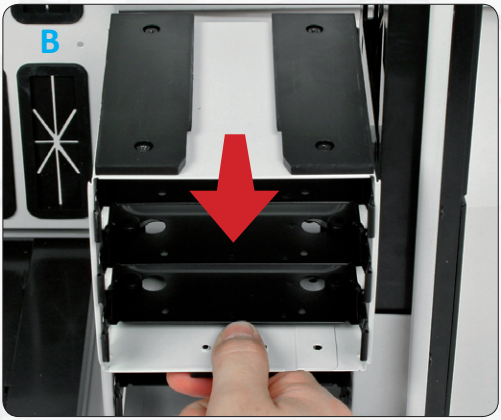
- Adjust the number of available HDD mounts
- Install extra-long graphic cards
- Optimize the air flow within the case
- Mount a water cooling system behind the front fans

In order to ensure an easy modification of the HDD-cages, we recommend that you remove both side panels of the case first.

a) Remove the upper age (A) by pressing the lever upwards, as shown in the picture.



b) Now pull the hard drive cage gently in the opposite direction.



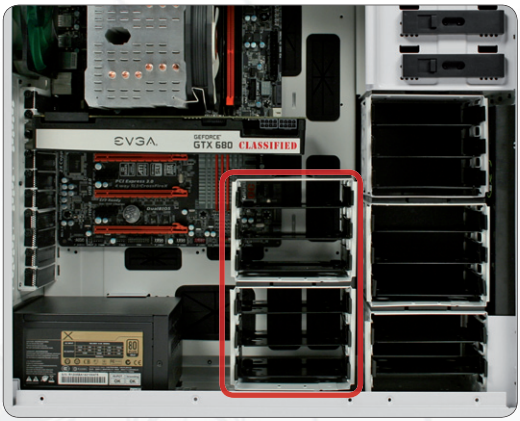
c) If you want to remove the middle cage as well, repeat steps a) and b) as stated above.

If you want to remove the middle cage and use only the upper cage, please note that the upper cage (A) is not firmly anchored to the case. It can be pulled out of the case without effort, if the central cage (B) is not installed.

The (de-)mounting of the additional HDD-cage on the secondary mounting rail works accordingly. You can purchase the additional cages at your local reseller.

The secondary HDD cage is screwed to the case bottom in order to ensure the greatest possible stability.

In order to remove the cage, you have to loosen the screws first!



Depending on your motherboard and display card used you can install additional HDD cages on the secondary holding frame when needed.

If you would like to remove the lower HDD-cage behind the front, for example to install a water cooling radiator, you need to remove the 8 screws which hold the cage in place.

First, remove the front panel (**see Chapter 5**).

Next loosen the four screws securing the HDD cage to the front panel. Finally, remove the four screws at the bottom of the case, after which you can remove the cage.

5. Removing the front panel

To remove the front panel, simply hold the cut-out at the bottom of the front panel and pull it towards you with a firm tug.

Please note that the cables of the I/O-panel are guided through the front into the chassis, so please be careful when removing the front.

6. Fan assembly

Three 140 mm fans are pre-installed in your Deep Silence 5. You can mount up to six fans in total.

We recommend the use of the 120 or 140 mm Nanoxia Deep Silence fans, available separately. These are technically and visually equivalent to the factory-installed case fans and will work in perfect harmony with the built-in fan control of your case.

You can, of course, connect the additional fans to the fan controller (**see Chapter 7**).

All air intake openings of the Deep Silence 5 are equipped with easy to clean dust filters. We recommend that you clean them on a regular basis.

6.1 Front Fans

To switch the fans in the front or to clean the dust filters, first open the lower front door. Next, open the “Easy Access Panel” by pushing slightly on the left side of the panel (**picture 6A**).

picture 6A

You can remove the fan by pushing away the retaining lugs a little bit from the fan and then pull the fan out (picture 6B).

The dust filters can easily be pulled out, as you can see here (picture 6C).

picture 6B picture 6C

Please note, that the filter elements must be fully inserted to guarantee the proper operation of the "Easy Access Panel".

6.2 Fans under the top cover

If you want to install additional fans at the top of the case, please remove the Nanoxia VentCovers first by removing the screws on the outside of the case.

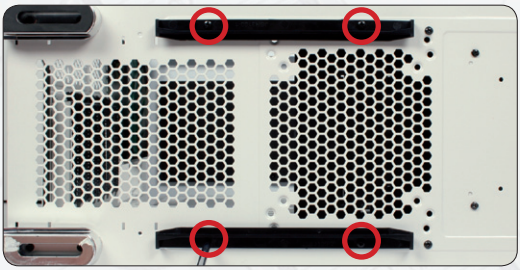
Next, hold the fans from the inside and secure them to the top by fastening the screws from the outside.

Case fans installed at the top of the case should exhaust air out of the case (fan rear side facing outwards).

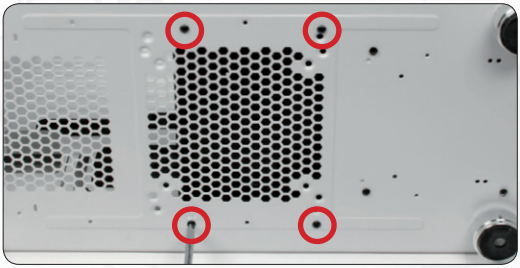
6.3 Fan at the bottom of the case

You can install a 120 or 140 mm fan on the bottom of the case. To do that, you must remove the secondary HDD-cage mounting rail from the case bottom. We recommend the following procedure:

a) Remove the dust filter and unscrew the screws on the two guide rails of the filter to remove it.



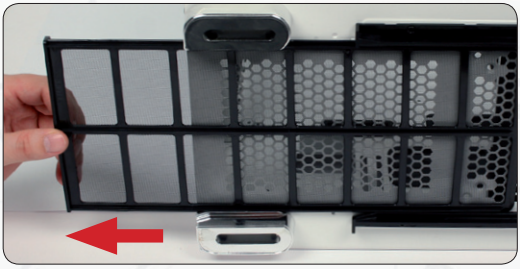
a) To remove the secondary hard drive cage, please remove the four screws, as shown on the image and remove the cage together with the holder.



c) Please place the fan on the inside of the case and secure it from the outside.

d) Attach the dust filter mounts again to the case bottom and slide the dust filter back to its original position.

The dust filter at the bottom can be pulled out for easy cleaning.



Additional case fans in the side panel and on the bottom of the Deep Silence 5 should be mounted so that cooler air is introduced into the case (fan rear side facing inwards).

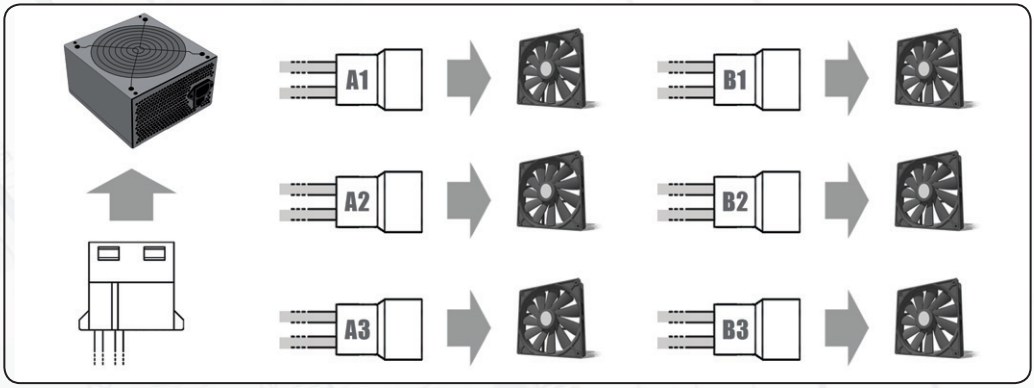
7. The 2-channel fan controller

The Deep Silence 5 is equipped with a 2-channel fan control for up to six case fans. You can operate up to three fans per channel.

7.1 Connecting the fans to the fan control

The fan controller is powered by a 4-pin Molex connector that is connected directly to the power supply.

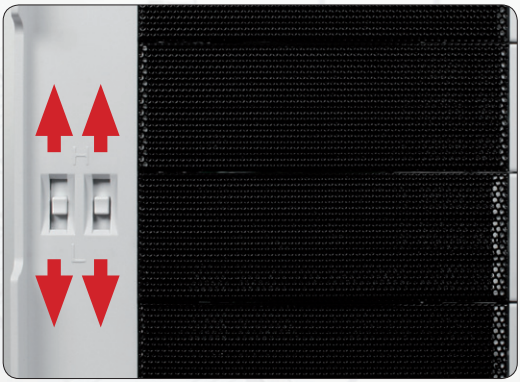
The controller has two channels (A and B), with each channel able to control up to three 3-pin fans, therefore a total of six fans can be controlled.



The fan controller is not designed for the operation of powerful fans. Please take this into account in particular when using fans from other manufacturers. The maximum power per channel must not exceed 18 watts.

7.2 Operation of the fan control

The sliders for controlling the fans controller can be found behind the upper front door. The upper slider controls channel A and the lower slider controls channel B.



8. Installing a water cooling solution

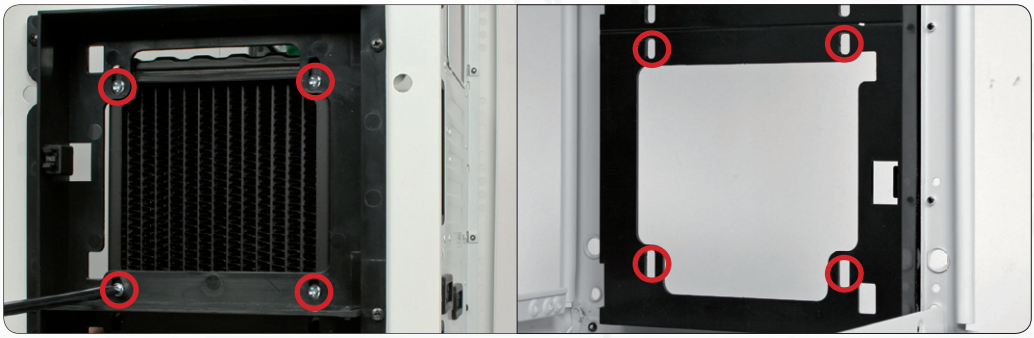
In Nanoxia Deep Silence 5 you can install radiators or compact water cooling systems both behind the front panel and under the top cover. We recommend the installation of the radiator behind the front panel.

8.1 Installation of a radiator or compact water cooling solution behind the front

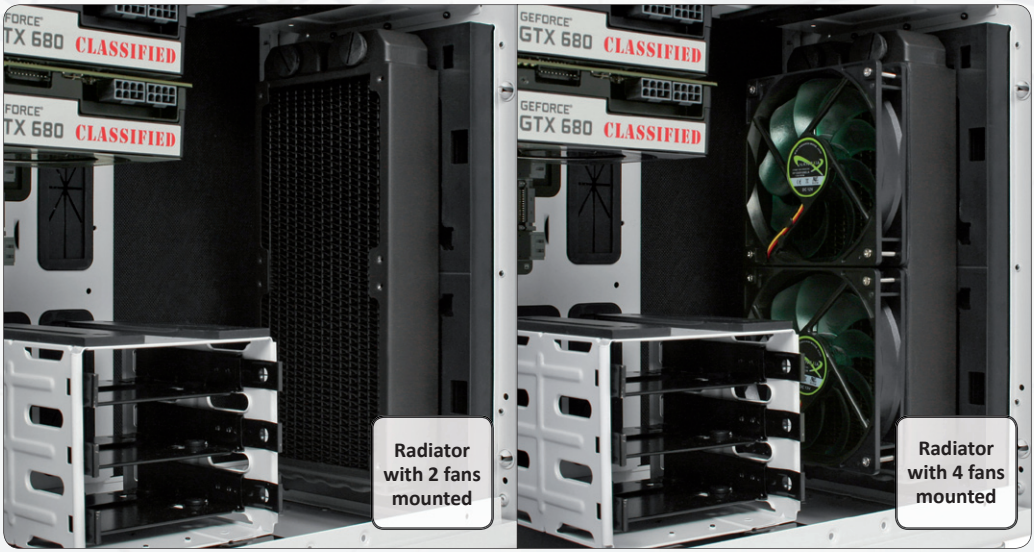
Thanks to the fully modular HDD-cages, you can mount a 120/140/240/280 mm radiator or a compact water cooling solution behind the front.

Please note that the radiator must not exceed 315 mm in length.

For the installation, please remove the modular HDD-cages (**see Chapter 4.2**). Open the lower front door and the “Easy Access” Panels and remove the fans. Hold the radiator from the inside and secure it with screws, using the corresponding mounting slots.



Finally, reinstall the fans. For maximum cooling performance, you can also mount additional fans on the back of the radiator.



8.2 Installation of a slim radiator or compact water cooling solution under the top cover

Under the top cover, you can install in a 240/280 mm slim radiator. To mount a radiator under the cover, please use the 120/140 mm fan mounting holes.

Before the installation, please check carefully, if the distance to the motherboard components is sufficient.

9. The I/O-Panel

The I/O panel includes connectors for external USB devices (2 x USB 2.0, 2 x USB 3.0), and the microphone and headphone ports.

The blue USB connectors are super-Speed USB 3.0, USB 2.0 ports are black. The left audio connector (when viewed from the front) is for headphones, the right is intended for a microphone.

The hard drive activity is indicated by flickering of the green illuminated power button.

10. Connecting the front connectors to the motherboard

10.1 USB 2.0

Diagram 10A shows the standard pin assignment of the USB cable plug. The pins are assigned in a way to fit on current motherboards as shown in **diagram 10B**.

Please refer to the motherboard and check that the internal USB port of your motherboard is identical to the one shown in **diagram 10A**. If the pin allocation of the internal USB port is the one shown in **diagram 10A** it is then possible to connect the cable.

If, however, the pin allocation of the internal USB port and the one shown in **diagram 10A** differ, please consult a professional. **Wrong connected cables might cause serious damage to your hardware.**

diagram 10A

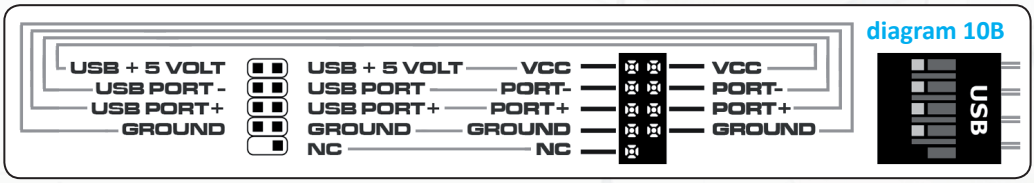


diagram 10B

10.2 USB 3.0

Diagram 10C shows the typical pin assignment of the internal 19-Pin USB 3.0. The pins are assigned in a way to fit on current motherboards (**diagram 10D**). By referring to the motherboard manual, please check that the internal 19-pin USB 3.0 port is identical to the one shown in **diagram 10C**.

If the pin allocation of the internal 19-Pin USB 3.0 plug and the one shown in **diagram 10C** are the same, please connect the cable. If, however, the pin allocation of the internal 19-Pin USB 3.0 plug and the one shown in diagram 10E differ, please consult a professional.
Wrong connected cables might cause serious damage to your hardware.

If your motherboard does not have an internal USB 3.0 port, you can acquire an internal 19-pin to external 2x USB 3.0 Type A adapter cable.

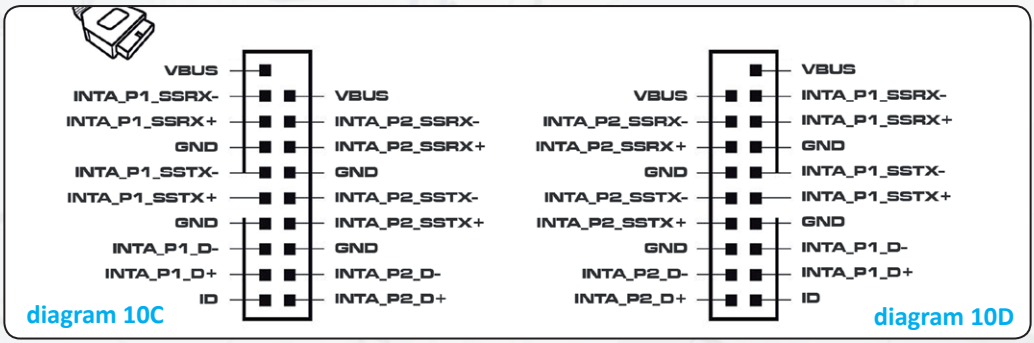
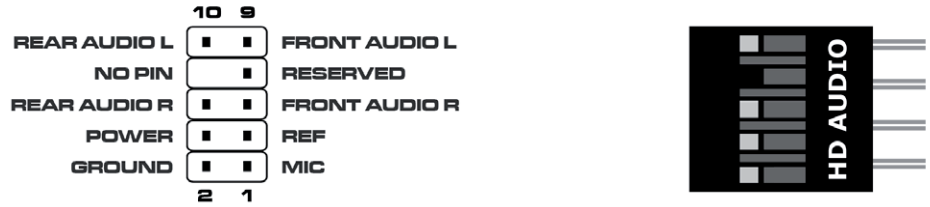


diagram 10C
diagram 10D

10.3 HD Audio

Diagram 10E shows the pin assignment of the standard HD audio cable plug. The pins are assigned in a way to fit on current motherboards. By referring to the motherboard manual, please check that the HD audio port is identical to the one shown in **diagram 10E**.
If the pin allocation of the HD audio plug and the one shown in **diagram 10E** are the same, please connect the cable. If, however, the pin allocation of the HD audio plug and the one shown in **diagram 10E** differ, please consult a professional.
Wrong connected cables might cause serious damage to your hardware.

Abb.10E

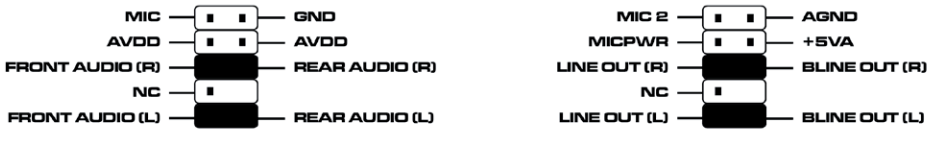


10.4 AC 97

Diagram 10F shows the standard pin assignment of the AC 97 cable plug. The pins are assigned in a way to fit on current motherboards as shown in **diagram 10G**.
Referring to your motherboard manual, please check if that the AC 97 port is identical to the typical shown in **diagram 10G**. If the pin allocation of the AC 97 plug and the one shown in **diagram 10G** are the same, please connect the cable. If, however, the pin allocation of the AC 97 plug and the one shown in **diagram 10G** differ, please consult a professional.
Wrong connected cables might cause serious damage to your hardware.

diagram 10F

diagram 10G



III. Support

Dear customer,

The PC case you purchased has undergone a very thorough quality control. Nevertheless, should there be any unexpected problems with your case we ask that you first approach the dealer where you purchased the product. They are prepared to assist you with competent and uncomplicated advice and practical support.

If perhaps a few screws were missing or you might have a question that can't be answered by this manual, please do not hesitate to contact us directly by e-mail.

Likewise, we would appreciate your suggestions and comments about our case very much. Our staff will respond to all inquiries quickly and professionally.

Customers from Germany and other European countries can use the following e-mail address for support questions, spare parts or warranty issues:

support@nanoxia-world.com

Customers from Africa, Asia, Australia as well as North and South America can use the following e-mail address for support questions, spare parts or warranty issues:

support.overseas@nanoxia-world.com

For general inquiries, comments, suggestions and the like please refer to:

info@nanoxia-world.com

We are sure that you will be satisfied with Nanoxia Deep Silence 5 for many years to come, so please enjoy your new PC case.

Your Nanoxia Support-Team